

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. **Shri Ashok Basu, Chairperson**
2. **Shri Bhanu Bhushan, Member**
3. **Shri A.H. Jung, Member**

**Petition No.158/2005**

**In the matter of**

In-principle acceptance of the project capital cost and the financing plan of 1500 MW Hazira Combined Cycle Power Project proposed to be set up by Essar Power Ltd.

**And in the matter of**

Essar Power Ltd.

**....Petitioner**

Vs

1. PTC India Limited, New Delhi
  2. Gujarat Urja Vikas Nigam Limited, Vadodara
  3. Maharashtra State Electricity Distribution Company Ltd., Mumbai
  4. Madhya Pradesh State Electricity Board, Jabalpur
- ...Respondents**

**The following were present:**

1. Shri D. Mazumdar, Essar Power Ltd.
2. Shri P. Srinivasan, Essar Power Ltd.
3. Shri A.K. Srivastava, Essar Power Ltd.
4. Shri S.S. Sharma, PTC India Ltd.

**ORDER  
(DATE OF HEARING : 22.6.2006)**

The petitioner has prayed for in-principle acceptance of the project capital cost and financing plan for Hazira Combined Cycle Power Plant (1500 MW), hereinafter called "the generating station", proposed to be set up.

2. Regulation 17 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 provides that the actual expenditure incurred on completion of a project shall form the basis for determination of final tariff. Third proviso to regulation 17 lays down that any person intending to establish, operate and maintain a generating station may make an application before the Commission for “in principle” acceptance of the project capital cost and financing plan before taking up a project. Fourth proviso further lays down that where the Commission has given “in principle” acceptance to the estimates of project capital cost and financing plan, the same shall be the guiding factor for applying prudence check on the actual capital expenditure. The present petition has been filed by virtue of the third proviso to regulation 17.

3. The generating station proposed to be established by the petitioner, will consist of two units of 750 MW each, and will have advanced class FA technology for gas turbines along with associated Waste Heat Recovery Boilers, and generators in multi-shaft configuration. The power generated is proposed to be sold to PTC India Limited, hereinafter called “PTC”, through a long-term Power Purchase Agreement. In turn, PTC would enter into Power Purchase Agreements with different States. PTC has reportedly sent proposals to the States of Gujarat, Maharashtra and Madhya Pradesh for off-take of power. It has been stated that most of the power generated would be sold to Gujarat Urja Vikas Nigam Limited and Maharashtra State Electricity Distribution Company Limited (MSEDCL) and the balance power shall be sold to Madhya Pradesh State Electricity Board.

4. Gujarat Urja Vikas Nigam Limited in its affidavit dated 31.1.2006 has stated that it has not given any commitment for procurement of power from the generating station and has advised the petitioner to participate in the competitive bidding as and when called by the former, in accordance with the guidelines issued by the Central Government. Madhya Pradesh State Electricity Board vide its letter dated 18.2.2006 has apprised of its "in principle" consent for off-take of power from the generating station without specifying the exact quantum of power to be procured. The petitioner has placed on record a letter from MSEDCL, that it has shown interest in procuring power from the generating station.

5. In accordance with clause (b) of sub-section (1) of Section 79 of the Electricity Act, 2003, the Central Commission has jurisdiction to regulate tariff of the generating companies, other than those owned or controlled by the Central Government, who enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State. We have to first consider whether the generating station meets this criteria. The petitioner has placed on record a copy of Ministry of Power letter No.A-118/2004/IPC dated 14.2.2005 according to which, the generating station meets the basic threshold criteria of minimum capacity of 1000 MW and inter-State sale of power, for grant of Mega Power Project status. Accordingly, the Ministry has accorded "in principle" Mega Power Project status for the generating station. This would mean that the petitioner prima facie meets the criteria of entering into or having composite scheme for generation and sale of electricity in more than one State. On being satisfied on this count, we proceed to consider the prayer made in the petition.

6. The petitioner has submitted that EPC contract was finalized with Essar Constructions Limited on 9.11.2005 after inviting bids through international competitive bidding process and after proper evaluation of the bids received. The Commission had called for the full details of the bidding process undertaken by the petitioner and also sought to ascertain whether there were any representations against the selection of the successful bidder. The petitioner has placed on record the necessary details of the bidding process leading to selection of Essar Constructions Limited for award of EPC contract. Further, the petitioner has clarified on affidavit that no representations were received from any of the unsuccessful bidders on selection of Essar Constructions Limited. On perusal of the information placed on record by the petitioner, we are satisfied that the bid and evaluation processes leading to award to EPC contract are in order.

**Capital Cost**

7. The capital cost of the generating station was initially indicated as Rs.3906.74 crore, comprising of 491.17 Million USD + Rs. 1245.63 crore at foreign exchange rate of Rs.45.25/USD in year 2006, and including IDC &FC & WCM of Rs.255.63 crore. Since the sum of the above breakup was not tallying with the total cost indicated in Rupees, the petitioner vide affidavit dated 24.4.2006 has submitted that there was an inadvertent error in calculation of the domestic component of the capital cost and has submitted the revised calculations.

8. As per the revised calculations, the details of capital cost are as follows:

		At FE rate of Rs.48.305/USD considered by the Petitioner	At FE rate of Rs.45.25USD (Base exchange rate in 2006)
<b>(A)</b>	<b>Capital Cost excluding IDC &amp; FC</b>		
(i)	Foreign component in Million USD	491.17	491.17
(ii)	Domestic Component (Rs. in crore)	1278.50	1278.50
(iii)	Capital cost excluding IDC & FC (Rs. in crore)	3651.11	3501.04
<b>(B)</b>	<b>IDC &amp; FC &amp; WCM</b>		
(i)	Foreign Component in Million USD	-	-
(ii)	Domestic Component in	255.63	255.63
(iii)	IDC & FC & WCM (Rs. in crore)	255.63	255.63
<b>(C)</b>	<b>Total Capital Cost (Rs. in crore)</b>	3906.74	3756.67
<b>(D)</b>	<b>Less WCM</b>	60.37	60.37
<b>(F)</b>	<b>Capital Cost excluding WCM (Rs. in crore)</b>	3846.37	3696.30
<b>(G)</b>	<b>Rs. in crore/MW</b>	2.62	2.52

9. The break up of cost of Rs.3906.74 crore corresponding to foreign exchange rate of Rs.48.305/USD is as follows:

<b>(Rs. in crore)</b>		
1.0	Cost of Land & Site Development	60.00
2.0	Total Plant & Equipment excluding taxes & Duties	3336.61
3.0	Taxes and Duties	26.00
4.0	Total Plant & Equipment including Taxes & Duties	3362.61
5.0	Initial spares	38.80
6.0	Civil Works	91.70
7.0	Construction & Pre- Commissioning Expenses	44.00
6.0	Overheads	54.00
7.0	Capital cost excluding IDC & FC	3651.11
8.0	Interest During Construction (IDC) & FC	195.26
9.0	Working Capital Margin	60.37
9.0	Capital cost including IDC & FC & WCM	3,906.74
10.0	Capital Cost/MW	2.67

10. It has been submitted that the generating station shall be executed with debt-equity ratio of 70:30 . The petitioner is stated to have tied up the funds in the following manner:

<b>Particulars</b>	<b>Rs. in crore</b>
<b>Rupee Debt (A)</b>	<b>2926.74</b>
PFC	910
Syndicate Bank	100
SIDBI	100
State Bank of Patiala	100
Union Bank of India	175.33
Central Bank of India	150
REC	750
State Bank of Indore	75
Few Banks	641.74
<b>Equity (B)</b>	<b>980</b>
Total Equity	980
<b>Total Financing (A+B)</b>	<b>3906.74</b>

11. There is no foreign funding and, therefore, capital cost when quoted in Rupees shall be subjected to FERV on account of payment to EPC contractor during the construction period.

12. It has been further stated that the arrangement for the long-term supply of 4.97 to 6.6 MMSCM of natural gas per day corresponding to generation from 80%-100% PLF is being discussed with GSPCL for concluding a definitive Gas Sale and Purchase Agreement (GSPA).

13. During pendency of the present petition, the Central Government in Ministry of Power notified the tariff policy under Section 3 of the Electricity Act on 6.1.2006. The policy *inter alia* lays down as under:

“All future requirement of power should be procured competitively by distribution licensees except in cases of expansion of existing projects or where there is a State controlled/owned company as an identified developer and

where regulators will need to resort to tariff determination based on norms provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than 50% of the existing capacity.

Even for the Public Sector projects, tariff of all new generation and transmission projects should be decided on the basis of competitive bidding after a period of five years or when the Regulatory Commission is satisfied that the situation is ripe to introduce such competition”.

14. The Commission vide letter dated 2.2.2006 sought clarifications from Ministry of Power on the scope and import of the tariff policy, with particular reference to the portions extracted above. Ministry of Power vide its letter dated 28.3.2006 has clarified that:

*“the power generation projects which satisfy any of the following conditions would be well within this provision of the Tariff Policy:*

- i) Where the Power Purchase Agreement (PPA) has been signed and approved by the Appropriate Commission prior to 6.1.06 or PPA has been signed and is pending before the Appropriate Commission on 6.1.06, such procurement would be treated as falling outside the scope of clause 5.1 of Tariff Policy as contractual obligation for procurement of power has been firmly established in such cases.*
- ii) Similarly, where the appraisal of any power project has started before 6.1.2006 by the relevant financial institutions for lending funds to the project on the basis of appropriate evidence of process of procurement of power by any utility, such procurement would be treated as falling outside the scope of clause 5.1 of the Tariff Policy provided that in all such cases final PPA is filed before the Appropriate Commission by 30<sup>th</sup> September, 2006.*
- iii) In case of hydro projects where detailed project report (DPR) has been submitted to the CEA/CWC before 6.1.06 for concurrence (except for projects where concurrence of DPR is not mandatory) and appropriate evidence of process of procurement of power by any utility exists before 6.1.2006, such procurement would be treated as falling outside the scope of clause 5.1 of Tariff Policy, provided that in all such case the final PPA is filed before the Appropriate Commission by 30<sup>th</sup> September, 2006. “*

15. From the available records, it is seen that Power Finance Corporation as the leader of the consortium of lending institutions has accorded its approval. Power

Finance Corporation had originally sanctioned loan of Rs.530 crore and by its letter dated 16.11.2005 it agreed to increase the loan amount to Rs.910 crore. The petitioner has further placed on record a letter dated 4.1.2006 from SBI Capital Markets Limited that sanctions aggregating to Rs.2435 crore from various banks and institutions, as per details given therein, for the generating station were received. On consideration of these facts, we are satisfied that the establishment of the generating station is covered under the tariff policy, as clarified by Ministry of Power under its letter dated 28.3.2006, provided the final PPAs are filed by the petitioner before 30.9.2006.

16. At the hearing, the representative of the petitioner, in response to certain queries made by the Commission clarified as under:

- (a) ABB's business of advanced class gas turbines has been taken over by ALSTOM and, therefore, Expression of Interest documents were not sent to ABB,
- (b) Siemens did not respond to the Expression of Interest documents and were therefore not shortlisted. ALSTOM did not submit an offer,
- (c) There was nothing specified in the bid documents that would have rendered the gas turbines of makes other than GE non-responsive,
- (d) Siemens and ALSTOM were perhaps having orders from other buyers, and, therefore, did not show any interest inspite of being called, and
- (e) Fuel purchase agreement is likely to be signed by 31.7.2006.

17. It has been noticed that the capital cost of the generating station works out to Rs.2.52 crore/MW at the exchange rate of Rs.45.25/USD. The cost compares



favourably with the per MW cost of other gas-based generating stations in the country. We, therefore, accord in principle approval to the project capital cost of USD 491.17 M + Rs.1534.13 crore (including Working Capital Margin of Rs.60.37 crore), subject to the following conditions:

- (a) The petitioner shall file before the Commission Power Purchase Agreements for off-take of at least 85% of capacity, with more than one State, latest by 30.9.2006. PPAs shall be entered directly by the petitioner with the Distribution Companies and not through a trader.
- (b) The beneficiaries shall not have any compulsion to pay capacity charge for any plant capability beyond what can be generated with natural gas available.

18. We have also taken note of the fact that as per para 5.7.1 of National Electricity Policy dated 12.2.2005, "a part of new generating capacities, say 15% may be sold outside long-term PPAs". This implies that PPAs need not cover the entire capacity.

19. The tariff for the electricity supplied from the generating station will be determined in accordance with the terms and conditions of tariff notified by the Commission and applicable from time to time, after prudence check of the actual expenditure.

20. It is clarified further that non-fulfillment of condition (a) at para 17 above will render this approval null and void.

21. The petition stands disposed of accordingly.

**Sd/-**  
**(A.H. JUNG)**  
**MEMBER**

**Sd/-**  
**(BHANU BHUSHAN)**  
**MEMBER**

**Sd/-**  
**(ASHOK BASU)**  
**CHAIRPERSON**

**New Delhi dated the 2<sup>nd</sup> August 2006**